ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 1994:107108 BIOSIS
DN PREV199497120108
TI Epithelioid and fibroblastic cell lines derived from the ileum of an adult histocompatible miniature boar (d/d haplotype) and immortalized by SV40 plasmid.
AU Kaeffer, Bertrand [Reprint author]; Bottreau, Elisabeth; Velge, Philippe; Pardon, Pierre
CS INRA, Lab. Pathol. Infectieuse et Immunol., F-37380 Nouzilly, France
SO European Journal of Cell Biology, (1993) Vol. 62, No. 1, pp. 152-162.
CODEN: EJCBDN. ISSN: 0171-9335.
DT Article
LA English
ED Entered STN: 14 Mar 1994
Last Updated on STN: 14 Mar 1994
AB Intestinal explants were maintained for weeks in a growth medium containing collagenase for progressive digestion to derive finite cell lines from the ileum (64 lines) or from the colon (8 lines) of a boar. Two ileal cell lines retaining either a fibroblastic or an epithelioid morphology have been used to derive heteroploid cell lines (IPI-1 and IPI-2) immortalized by transfection with an SV40 plasmid (pSV3-neo). The IPI-1 cells were found of fibroblastic lineage. The IPI-2 cell line gave rise to morphologically heterogeneous colonies ranging from typical epithelial cells to colonies of more-elongated cells. A crisis occurred during subcultivation of IPI-2 leading to the isolation of the IPI-21 cell line with a 24 h doubling time and a 21% plating efficiency. Epithelial nature of IPI-21 cells was supported by ultrastructural analysis of the cell monolayers. Differentiated cells were found to express microvilli at the apical cellular membrane and desmosomes connecting adjacent cells. Stable epithelioid phenotypes were obtained only from the IPI-21 cell line by multiple subcloning. These cells were found to express characteristics of both epithelial and mesenchymal cells by positive immunostaining with monoclonal antibodies reacting either with keratin 18 filament of simple epithelia or with vimentin filament typical in vivo of mesoderm. The lack or villin expression and the absence of transepithelial resistance have to be related to a poor differentiated state of this cell line. All these immortalize cell lines were permissive to the replication of microorganisms pathogenic for pig (Salmonella chloleraesuis, Salmonella typhimurium and tissue culture-adapted strains of transmissible gastroenteritis virus). The collection of finite and continuous cell lines will help to develop in vitro methods for long-term propagation of freshly isolated epithelium or three-dimensional organ culture in pig. In addition, the IPI-21 cell line provides a new model to study the conversion from a transformed to a nontransformed phenotype as incorporation of 2% dimethyl sulfoxide in the growth medium to repress large tumor antigen expression led to the progressive disappearance of cytokeratin 18 positive cells with, over a week, the death of the surviving vimentin-positive cells.
CC Cytology - Animal 02506
Biochemistry studies - Proteins, peptides and amino acids 10064
Metabolism - Proteins, peptides and amino acids 13012
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Bones, joints, fasciae, connective and adipose tissue - Physiology and biochemistry 18004
Neoplasms - Immunology 24003
Neoplasms - Neoplastic cell lines 24005
Neoplasms - Carcinogens and carcinogenesis 24007
Physiology and biochemistry of bacteria 31000
Tissue culture, apparatus, methods and media 32500
Virology - Animal host viruses 33506
Medical and clinical microbiology - Bacteriology 36002
Medical and clinical microbiology - Virology 36006

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Biochemistry studies - Proteins, peptides and amino acids 10064
Metabolism - Proteins, peptides and amino acids 13012
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Bones, joints, fasciae, connective and adipose tissue - Physiology and biochemistry 18004
Neoplasms - Immunology 24003
Neoplasms - Neoplastic cell lines 24005
Neoplasms - Carcinogens and carcinogenesis 24007
Physiology and biochemistry of bacteria 31000
Tissue culture, apparatus, methods and media 32500
Virology - Animal host viruses 33506
Medical and clinical microbiology - Bacteriology 36002
Medical and clinical microbiology - Virology 36006

IT Major Concepts
Cell Biology; Digestive System (Ingestion and Assimilation); Infection; Metabolism; Methods and Techniques; Skeletal System (Movement and Support); Tumor Biology

IT Miscellaneous Descriptors
IPI-1 CELL LINE; IPI-2 CELL LINE; IPI-2I CELL LINE; PATHOGENIC MICROORGANISM PERMISSIVE CELL LINES; TISSUE CULTURE; TUMOR ANTIGEN EXPRESSION; VIMENTIN

ORGN Classifier
Coronaviridae 03613
Super Taxa
Positive Sense ssRNA Viruses; Viruses; Microorganisms
Organism Name
transmissible gastroenteritis virus
Taxa Notes
Microorganisms, Positive Sense Single-Stranded RNA Viruses, Viruses

ORGN Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Salmonella choleraesuis
Salmonella typhimurium
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGN Classifier
Suidae 85740
Super Taxa
Artiodactyla; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Suidae
Taxa Notes
Animals, Artiodactyls, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

ORGN Classifier
dsDNA Viruses 03100
Super Taxa
Viruses; Microorganisms
Organism Name
Papovaviridae
Taxa Notes
Double-Stranded DNA Viruses, Microorganisms, Viruses

IT Major Concepts
Cell Biology; Digestive System (Ingestion and Assimilation); Infection; Metabolism; Methods and Techniques; Skeletal System (Movement and Support); Tumor Biology

IT Miscellaneous Descriptors
IPI-1 CELL LINE; IPI-2 CELL LINE; IPI-2I CELL LINE; PATHOGENIC MICROORGANISM PERMISSIVE CELL LINES; TISSUE CULTURE; TUMOR ANTIGEN EXPRESSION; VIMENTIN

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Microorganisms, Positive Sense Single-Stranded RNA Viruses, Viruses

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Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
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Salmonella typhimurium
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGN Classifier
Suidae 85740
Super Taxa
Artiodactyla; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Suidae
Taxa Notes
Animals, Artiodactyls, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

ORGN Classifier
dsDNA Viruses 03100
Super Taxa
Viruses; Microorganisms
Organism Name
Papovaviridae
Taxa Notes
Double-Stranded DNA Viruses, Microorganisms, Viruses

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(FILE 'HOME' ENTERED AT 12:29:25 ON 25 APR 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 12:29:56 ON 25 APR 2007

L1	5	S (VIMENTIN SECRET?)
L2	4	DUPLICATE REMOVE L1 (1 DUPLICATE REMOVED)
L3	2	S L2 AND PD<2003
L4	42161	S VIMENTIN?
L5	4	S L4 AND BIOAVAIL?
L6	4	DUPLICATE REMOVE L5 (0 DUPLICATES REMOVED)
L7	1	S L6 AND PD<2003
L8	147	S PATHOGEN AND VIMENTIN?
L9	129	DUPLICATE REMOVE L8 (18 DUPLICATES REMOVED)
L10	55	S L9 AND PD<2003
L11	14	S L10 AND BACTER?

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L7	1	S L6 AND PD<2003
L8	147	S PATHOGEN AND VIMENTIN?
L9	129	DUPLICATE REMOVE L8 (18 DUPLICATES REMOVED)
L10	55	S L9 AND PD<2003
L11	14	S L10 AND BACTER?

ANSWER 5 OF 14 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2002:799 BIOSIS
DN PREV200200000799
TI Effects of intermediate filaments on actin-based motility of Listeria monocytogenes.
AU Giardini, Paula A.; Theriot, Julie A. [Reprint author]
CS Department of Biochemistry, Stanford University School of Medicine, 279 West Campus Drive, Stanford, CA, 94305-5307, USA
theriot@cmgm.stanford.edu
SO Biophysical Journal, (December, 2001) Vol. 81, No. 6, pp. 3193-3203. print.
CODEN: BIOJAU. ISSN: 0006-3495.
DT Article
LA English
ED Entered STN: 28 Dec 2001
Last Updated on STN: 25 Feb 2002
AB How does subcellular architecture influence the intracellular movements of large organelles and macromolecular assemblies? To investigate the effects of mechanical changes in cytoplasmic structure on intracellular motility, we have characterized the actin-based motility of the intracellular bacterial pathogen Listeria monocytogenes in normal mouse fibroblasts and in fibroblasts lacking intermediate filaments. The apparent diffusion coefficient of L. monocytogenes was two-fold greater in vimentin-null fibroblasts than in wild-type fibroblasts, indicating that intermediate filaments significantly restrict the Brownian motion of bacteria. However, the mean speed of L. monocytogenes actin-based motility was statistically identical in vimentin -null and wild-type cells. Thus, environmental drag is not rate limiting for bacterial motility. Analysis of the temporal variations in speed measurements indicated that bacteria in vimentin -null cells displayed larger fluctuations in speed than did trajectories in wild-type cells. Similarly, the presence of the vimentin meshwork influenced the turning behavior of the bacteria; in the vimentin-null cells, bacteria made sharper turns than they did in wild-type cells. Taken together, these results suggest that a network of intermediate filaments constrains bacterial movement and operates over distances of several microns to reduce fluctuations in motile behavior.
CC Cytology - Animal 02506
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Physiology and biochemistry of bacteria 31000
IT Major Concepts
Biochemistry and Molecular Biophysics
IT Parts, Structures, & Systems of Organisms
cytoplasm, structure; fibroblasts
IT Chemicals & Biochemicals
actin; intermediate filaments; vimentin
IT Methods & Equipment
speed measurement: analytical method
IT Miscellaneous Descriptors
environmental drag; intracellular movements; motile behavior; subcellular architecture; turning behavior
ORGN Classifier
Regular Nonsporing Gram-Positive Rods 07830
Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
Listeria monocytogenes
Taxa Notes
Bacteria, Eubacteria, Microorganisms
RN 132579-20-5 (ACTIN)

L11 ANSWER 6 OF 14 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

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DN PREV200200000799
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CC Cytology - Animal 02506
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Physiology and biochemistry of bacteria 31000
IT Major Concepts
Biochemistry and Molecular Biophysics
IT Parts, Structures, & Systems of Organisms
cytoplasm, structure; fibroblasts
IT Chemicals & Biochemicals
actin; intermediate filaments; vimentin
IT Methods & Equipment
speed measurement: analytical method
IT Miscellaneous Descriptors
environmental drag; intracellular movements; motile behavior; subcellular architecture; turning behavior
ORGN Classifier
Regular Nonsporing Gram-Positive Rods 07830
Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
Listeria monocytogenes
Taxa Notes
Bacteria, Eubacteria, Microorganisms
RN 132579-20-5 (ACTIN)

L11 ANSWER 6 OF 14 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ANSWER 2 OF 14 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2002:570936 BIOSIS
DN PREV200200570936
TI Processing of intermediate filaments in Clostridium difficile TcdB intoxicated HeLa cells.
AU Ramsey, M. [Reprint author]; Spyres, L. [Reprint author]; Qa'Dan, M. [Reprint author]; Daniel, J. [Reprint author]; Ballard, J. D. [Reprint author]
CS University of Oklahoma, Norman, OK, USA
SO Abstracts of the General Meeting of the American Society for Microbiology, (2002) Vol. 102, pp. 50. print.
Meeting Info.: 102nd General Meeting of the American Society for Microbiology. Salt Lake City, UT, USA. May 19-23, 2002. American Society for Microbiology.
ISSN: 1060-2011.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 7 Nov 2002
Last Updated on STN: 7 Nov 2002
AB Clostridium difficile elicits two large clostridial toxins, TcdA and TcdB, both of which inactivate small GTPases (Rho, Rac and Cdc42). In this study the impact of TcdB intoxication was analyzed at the protein level in cultured mammalian cells. HeLa cells (1X107) were treated with 2 pmol of toxin for 24 h and protein extracts were collected from the treated cells and mock treated control cells. These extracts were resolved by 2-dimensional gel electrophoresis and the protein profile was detected by coomassie blue staining. A prominent differential spot, which appeared more abundant in toxin treated cells, migrated at about 23 kD. This spot was subjected to in-gel trypsin proteolysis and subsequent tandem-mass-spectrometry analysis. Tryptic peptides were resolved by ESI-MS and doubly charged fragments were selected and subjected to CID for amino-acid sequencing. A putative amino-acid sequence profile was obtained for 3 peptides and these revealed 100% homology with the human intermediate filament, vimentin. Interestingly, vimentin has a known mass of approximately 57 kD, suggesting the differential spot may be a result of protein processing. As further evidence for vimentin processing, one fragment encompassing residues 86 to 98 (F86-K98) was of particular interest since this peptide contained only one trypsin recognition site. Unlike the carboxy terminus, there was no detectable trypsin cleavage site at the amino terminus of F86-K98, suggesting this peptide was generated by a protease other than trypsin. Further analysis of the protein sequence revealed the amino-terminal cleavage and generation of F86-K98 occurred at a caspase-3 cleavage site with the consensus sequence, DXXD. Immunocytochemistry of TcdB-intoxicated cells revealed early rearrangement of vimentin and an eventual overall decrease in total cellular vimentin, which also closely coincided with actin condensation. These results suggest vimentin processing may contribute to the gross morphological in TcdB-intoxicated cells and is likely the result of caspase activation and programmed cell death.
CC General biology - Symposia, transactions and proceedings 00520
Cytology - General 02502
Cytology - Human 02508
Biochemistry studies - General 10060
Bacteriology, general and systematic 30000
Morphology and cytology of bacteria 30500
Physiology and biochemistry of bacteria 31000
Medical and clinical microbiology - Bacteriology 36002
IT Major Concepts
Bacteriology; Biochemistry and Molecular Biophysics; Cell Biology; Infection
IT Diseases
Clostridium difficile infection: bacterial disease

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Cytology - Human 02508
Biochemistry studies - General 10060
Bacteriology, general and systematic 30000
Morphology and cytology of bacteria 30500
Physiology and biochemistry of bacteria 31000
Medical and clinical microbiology - Bacteriology 36002
IT Major Concepts
Bacteriology; Biochemistry and Molecular Biophysics; Cell Biology; Infection
IT Diseases
Clostridium difficile infection: bacterial disease

Clostridium Infections (MeSH)
IT Chemicals & Biochemicals
TcdB: clostridial toxin; bacterial toxins
IT Miscellaneous Descriptors
caspase activation; intermediate filament processing; pathogenesis; programmed cell death; vimentin processing; Meeting Abstract
ORGN Classifier
Endospore-forming Gram-Positives 07810
Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
Clostridium difficile: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HeLa cell line
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

Clostridium Infections (MeSH)
IT Chemicals & Biochemicals
TcdB: clostridial toxin; bacterial toxins
IT Miscellaneous Descriptors
caspase activation; intermediate filament processing; pathogenesis; programmed cell death; vimentin processing; Meeting Abstract
ORGN Classifier
Endospore-forming Gram-Positives 07810
Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
Clostridium difficile: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HeLa cell line
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ANSWER 3 OF 14 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
AN 2002:562276 BIOSIS
DN PREV200200562276
TI Clostridium difficile toxin B activates dual caspase-dependent and caspase-independent apoptosis in intoxicated cells.
AU Qa'Dan, Maen; Ramsey, Matthew; Daniel, Jeremy; Spyres, Lea M.; Safiejko-Mroczka, Barbara; Ortiz-Leduc, William; Ballard, Jimmy D. [Reprint author]
CS Department of Botany and Microbiology, University of Oklahoma, 770 Van Vleet Oval, GLCH 516, Norman, OK, 73019, USA
jballard@ou.edu
SO Cellular Microbiology, (July, 2002) Vol. 4, No. 7, pp. 425-434.
print.
ISSN: 1462-5814.
DT Article
LA English
ED Entered STN: 30 Oct 2002
Last Updated on STN: 30 Oct 2002
AB Clostridium difficile toxin B (TcdB) inactivates the small GTPases Rho, Rac and Cdc42 during intoxication of mammalian cells. In the current work, we show that TcdB has the potential to stimulate caspase-dependent and caspase-independent apoptosis. The apoptotic pathways became evident when caspase-3-processed-vimentin was detected in TcdB-treated HeLa cells. Caspase-3 activation was subsequently confirmed in TcdB-intoxicated HeLa cells. Interestingly, caspase inhibitor delayed TcdB-induced cell death, but did not alter the time-course of cytopathic effects. A similar effect was also observed in MCF-7 cells, which are deficient in caspase-3 activity. The time-course to cell death was almost identical between cells treated with TcdB plus caspase inhibitor and cells intoxicated with the TcdB enzymatic domain (TcdB1-556). Unlike TcdB treated cells, intoxication with TcdB1-556 or expression of TcdB1-556 in a transfected cell line, did not stimulate caspase-3 activation yet cells exhibited cytopathic effects and cell death. Although TcdB1-556 treated cells did not demonstrate caspase-3 activation these cells were apoptotic as determined by differential annexin-V/propidium iodide staining and nucleosomal DNA fragmentation. These data indicate TcdB triggers caspase-independent apoptosis as a result of substrate inactivation and may evoke caspase-dependent apoptosis due to a second, yet undefined, activity of TcdB. This is the first example of a bacterial virulence factor with the potential to stimulate multiple apoptotic pathways in host cells.
CC Cytology - General 02502
Cytology - Human 02508
Biochemistry studies - Proteins, peptides and amino acids 10064
Enzymes - General and comparative studies: coenzymes 10802
Digestive system - Pathology 14006
Toxicology - General and methods 22501
Morphology and cytology of bacteria 30500
Physiology and biochemistry of bacteria 31000
Medical and clinical microbiology - Bacteriology 36002
IT Major Concepts
Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Infection; Toxicology
IT Diseases
Clostridium difficile infection: bacterial disease, digestive system disease
Clostridium Infections (MeSH)
IT Chemicals & Biochemicals
caspase-3; toxin B: toxin; vimentin
IT Miscellaneous Descriptors
apoptosis
ORGN Classifier
Endospore-forming Gram-Positives 07810
Super Taxa

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AU Qa'Dan, Maen; Ramsey, Matthew; Daniel, Jeremy; Spyres, Lea M.; Safiejko-Mroczka, Barbara; Ortiz-Leduc, William; Ballard, Jimmy D. [Reprint author]
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SO Cellular Microbiology, (July, 2002) Vol. 4, No. 7, pp. 425-434.
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Enzymes - General and comparative studies: coenzymes 10802
Digestive system - Pathology 14006
Toxicology - General and methods 22501
Morphology and cytology of bacteria 30500
Physiology and biochemistry of bacteria 31000
Medical and clinical microbiology - Bacteriology 36002
IT Major Concepts
Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Infection; Toxicology
IT Diseases
Clostridium difficile infection: bacterial disease, digestive system disease
Clostridium Infections (MeSH)
IT Chemicals & Biochemicals
caspase-3; toxin B: toxin; vimentin
IT Miscellaneous Descriptors
apoptosis
ORGN Classifier
Endospore-forming Gram-Positives 07810
Super Taxa

Eubacteria; Bacteria; Microorganisms
Organism Name
Clostridium difficile: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HeLa cell line
MCF-7 cell line
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 169592-56-7 (caspase-3)

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        Eubacteria; Bacteria; Microorganisms
      Organism Name
        Clostridium difficile: pathogen
      Taxa Notes
          Bacteria, Eubacteria, Microorganisms
ORGN  Classifier
        Hominidae   86215
      Super Taxa
        Primates; Mammalia; Vertebrata; Chordata; Animalia
      Organism Name
        HeLa cell line
        MCF-7 cell line
      Taxa Notes
        Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN    169592-56-7 (caspase-3)
```

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AN 1992:458106 BIOSIS
DN PREV199294099506; BA94:99506
TI TRYPANOSOMA-CRUZI INFECTION OF BSC-1 FIBROBLAST CELLS CAUSES CYTOSKELETAL DISRUPTION AND CHANGES IN INTRACELLULAR CALCIUM LEVELS.
AU LOW H P [Reprint author]; PAULIN J J; KEITH C H
CS DEP ZOOL, UNIV GA, ATHENS, GA 30602, USA
SO Journal of Protozoology, (1992) Vol. 39, No. 4, pp. 463-470.
CODEN: JPROAR. ISSN: 0022-3921.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 7 Oct 1992
Last Updated on STN: 8 Oct 1992
AB The disruption of vimentin and actin filaments of host BSC-1 fibroblast cells by Trypanosoma cruzi was investigated using a mouse monoclonal anti-vimentin antibody and rhodamine phalloidin, respectively. Indirect immunofluorescence microscopy demonstrated that infection of BSC-1 cells by T. cruzi caused disruption of both cytoskeletal components. The disruption was greater as infection progressed. Mechanisms other than mechanical ones may play a role in the disruption since disrupted cytoskeletal elements were well removed from the parasites. In the determination of intracellular calcium concentrations using Fura-2 AM, infected and uninfected cells both showed an initial increase in intracellular calcium levels. At later times of infection (3 to 5 days), intracellular calcium levels of infected cells were significantly lower than those of control cells. There was no specific localization of intracellular calcium in the infected host cells as determined by image analysis.
CC Cytology - Animal 02506
Radiation biology - Radiation and isotope techniques 06504
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Minerals 10069
Development and Embryology - General and descriptive 25502
Public health: epidemiology - Communicable diseases 37052
Parasitology - Medical 60504
Invertebrata: comparative, experimental morphology, physiology and pathology - Protozoa 64002
IT Major Concepts
Biochemistry and Molecular Biophysics; Epidemiology (Population Studies); Parasitology; Physiology
IT Miscellaneous Descriptors
MOUSE CELLS CHAGAS' DISEASE PATHOGEN TRYPANOSOMIASIS PATHOGEN HUMAN HEALTH SIGNIFICANCE ACTIN AMASTIGOTE INDIRECT IMMUNOFLUORESCENCE MICROTUBULES VIMENTIN
ORGN Classifier
Flagellata 35200
Super Taxa
Protozoa; Invertebrata; Animalia
Taxa Notes
Animals, Invertebrates, Microorganisms, Protozoans
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,

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ORGN Classifier
Flagellata 35200
Super Taxa
Protozoa; Invertebrata; Animalia
Taxa Notes
Animals, Invertebrates, Microorganisms, Protozoans

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,

Rodents, Vertebrates
RN 7440-70-2 (CALCIUM)
132579-20-5 (ACTIN)

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AN 1988:241182 BIOSIS
DN PREV198885119584; BA85:119584
TI CULTURE AND CHARACTERIZATION OF RAT JUNCTIONAL EPITHELIUM.
AU ALTMAN L C [Reprint author]; NELSON C L; POVOLNY B; FLECKMAN P; DALE B A; MAIER R V; SODERLAND C; BAKER C
CS DIV ALLERGY INFECT DIS, DEP MED, RM-13, UNIV WASH, SEATTLE, WASH 98195, USA
SO Journal of Periodontal Research, (1988) Vol. 23, No. 2, pp. 91-99.
CODEN: JPDRAY. ISSN: 0022-3484.
DT Article
FS BA
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(FILE 'HOME' ENTERED AT 12:29:25 ON 25 APR 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 12:29:56 ON 25 APR 2007

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L1             5 S (VIMENTIN SECRET?)
L2             4 DUPLICATE REMOVE L1 (1 DUPLICATE REMOVED)
L3             2 S L2 AND PD<2003
L4         42161 S VIMENTIN?
L5             4 S L4 AND BIOAVAIL?
L6             4 DUPLICATE REMOVE L5 (0 DUPLICATES REMOVED)
L7             1 S L6 AND PD<2003
L8           147 S PATHOGEN AND VIMENTIN?
L9           129 DUPLICATE REMOVE L8 (18 DUPLICATES REMOVED)
L10           55 S L9 AND PD<2003
L11           14 S L10 AND BACTER?
L12           41 S L10 NOT L11
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